

## **Wind and Prairie Task Force Minutes, March 19, 2004**

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The meeting of the Wind and Prairie Task Force was called to order at 10:00 a.m. on Friday, March 19, 2004, in the SRS Learning Center, Topeka, Kansas, by Jerry Karr and Jerry Lonergan, Co-Chairs. Task force members introduced themselves.

### **Present:**

Rose Bacon	rancher
Claude Blevins	county zoning administrator
Sheila Frahm	Natural Resource Legacy Alliance
Jan Jantzen	KS Flint Hills Adventures, LLC (tourism)
Jerry Karr	farmer
Jerry Lonergan	Kansas Inc
Jim Ludwig	Westar
Alan Phipps	rancher, County Commissioner
Alan Pollom	Nature Conservancy
Richard Porter	rancher
Richard Seaton	Audubon of Kansas
Jennifer States	JW Prairie Windpower, developer
Don Stephens	rancher
Joseph Stout	rancher
John Strickler	Natural Resource Legacy Alliance
Monty Wedel	county planner

### **Technical advisory group - Ex officio members**

Charles Benjamin	attorney
Niki Christopher	attorney
Ryan Dyer	Chair, Prairie Band Potawatomi Energy Committee
Bruce Graham	KEPCO
Mike Irvin	Kansas Farm Bureau
Ward Jewell	professor of electrical engineering at WSU
Ed Martinko	State Biologist
Robert Robel	professor emeritus of biology at KSU

### **Staff**

Melany Miller	Kansas Geological Survey
Scott White	Kansas Geological Survey

### **Special guests:**

Ed DeMeo	National Wind Coordinating Commission
Lee Allison	Kansas Geological Survey; SERCC Chair
Al Macfarlane	Kansas Geological Survey
Ken Nelson	Kansas Geological Survey
Les Evans	SERCC liaison to WPTF

## **Agenda**

### **Wind and Prairie Task Force 4<sup>th</sup> Meeting – March 19, 2004**

#### **SRS Learning Center**

#### **2600 SE East Circle Drive South, Room A**

directions to the building and printable map are at:

**[http://www.kansasenergy.org/sercc\\_wptf\\_meetings.htm](http://www.kansasenergy.org/sercc_wptf_meetings.htm)**

- 10:00 Welcome and Introductions – Jerry Karr and Jerry Lonergan, co-chairs
- 10:10 Review of Agenda
- 10:15 Ed Demeo, representing the National Wind Coordinating Committee:
  - economic development impacts of wind development
  - examples of siting issues and resolution of these areas
  - other issues
- 11:45 Les Evans, Task Force liaison to the State Energy Resource Coordinating Council
  - economic/business logic of wind development in utility transmission planning
- 12:15 Lunch
- 1:00 Al Macfarlane, Kansas Geological Survey
  - overview of development impacts on land and geology
- 2:00 Discussion of Basic Task Force Assumptions – Co-chairs
- 2:30 Subcommittee Reports
  - Leasing
  - Land Trust
  - Mapping
- 3:30 Next Steps
- 3:45 Adjourn

## **Welcome and Introductions**

Jerry Lonergan outlined the agenda for the day's meeting and made announcements about location of restrooms and vending machines.

Jerry Karr discussed the email listserve, noting that it is open to anyone to voice opinions. Meetings are open. We will submit our report at the end of May. Potential Public Forum Hearings in the future. May want to hold meetings in El Dorado area in order to bring in public opinions from those areas. Jerry Lonergan will be leaving to testify today, so he will not be here for the whole meeting.

## **Overview of Economic Development, Siting, and Other Issues Related to Wind Development**

Jerry Karr introduced Ed DeMeo, based in California, who is here today representing National Wind Coordinating Commission. The presentation will include economic impacts of wind projects (both positive and negative), examples of siting issues and how they are resolved outside of state of Kansas, and other issues of the industry.

Powerpoint presentation entitled "Wind Power Expansion: Key Development and Integration Issues" (available at **[http://www.kansasenergy.org/sercc\\_wptf\\_meetings.htm](http://www.kansasenergy.org/sercc_wptf_meetings.htm)**).

DeMeo noted that he deals with renewable energy issues, particularly with wind. Works with the National Wind Coordinating Committee and the Utility Wind Interest Group.

DeMeo: I will talk about issues associated with the development of wind and integration into the power system. Les Evans will talk about some of these power integration issues as well. Noted that there are a number of myths about impacts of wind development. Passed out bookmarks from the National Wind Coordinating Committee with website information.

Regarding wind variability and its impact on operations: We take the power and utility system for granted. We flip a switch and expect the light to come on. The electric power system is probably the most sophisticated machine ever built. There is a perfect balance of the power being generated and the power being consumed that is controlled by an operator. Wind is totally different. Wind is not controlled by an operator. It is controlled by nature. You can't just flip a switch. It takes a long time for a coal plant to heat up and actually start producing. With wind plants, you can plan winds on an hourly basis, but not days in advance. If you decide the wind is not going to blow tomorrow, you plan to fire up this coal plant. Tomorrow comes and the wind blows. You didn't need the coal plant after all. There is a cost in this as you generated extra costs. Wind variability can increase power system operating costs.

[Les Evans: The utility has some idea what their load will look like, but they have a customer that may upload a large load unexpectedly or someone drop a load.]

Environmental Impacts: These are the major things people talk about: impacts on birds, wildlife in general, visual impacts, property values and noise. The biggest impact seems to be with the birds, particularly raptors and migrating songbirds. The wind industry has learned to spot problem areas and knows to avoid these areas. Compared bird deaths from windpower to those from tall buildings, communication towers, power lines, and house cats. Bird deaths from wind are about 50,000 of about 1 billion total.

The other concern is visual. There is also the concern over property values. So far no impact has been seen on the property values. Older models did make a lot of noise. Today's technology is much quieter, you hear just the "whoosh" sound from the wind in the blades. Noise issue is very low.

There are always tradeoffs when you are looking at building power plants. The question is "what would you build if you did not build wind power?" Coal plant? The total environmental impacts from something else would be greater than with a wind plant. There are a lot of positive things to say about wind power, such as the environmental benefits: no emissions, completely clean, no greenhouse gasses, and no toxic waste.

Some say okay, I agree that wind power is cleaner, but let's use it when it becomes competitive with conventional power. What Does Energy Really Cost. All power gets government subsidy. Nuclear has accident liability and waste handling costs. Coal has respiratory concerns, coal miners have black lung disease, numerous health costs. Oil and Gas has depleted resources and maintenance costs.

Wind Plant Siting and Permitting. Siting has to be done very well. The National Wind Coordinating Council has produced wind siting guidelines (available at [www.nationalwind.org](http://www.nationalwind.org)).

Economic development: Land lease payments have given many farmers an additional source of income (\$2,500 to \$4,000/ year). Construction of wind farms creates temporary construction jobs (1-2 jobs/MW). Operation and maintenance creates long-term jobs in local communities (2-5 jobs/50-100 MW). Local construction and services are called in to build and maintain. Local property tax revenue brings benefits to communities. "Assessing the Economic Development Impacts of Wind Power" is available at [www.nationalwind.org](http://www.nationalwind.org).

Equity investors and lenders: Historically, most of the money investment has come from overseas investors who tend to be more confident because they already have wind power. As we move to local investments, this will provide more returns to the local communities.

National Wind Coordinating Council Development Report available at [www.nationalwind.org](http://www.nationalwind.org).

**Questions and Comments about DeMeo's presentation included:**

1. Are you figuring the subsidies or the tax credits in that? (It doesn't factor in; it's just a guess. For wind, 3 cents with the production tax credit and 4 cents without it.)
2. What is the 1.8 cent? (You get 1.8 cent for the first 10 years of operation, which leveled out over 30 years turns out to be about 1 penny.)
3. The synergy would work with existing gas-fired plants, but is there any potential for coal-fired plants? (It wouldn't be as simple as this.)
4. What about nuclear plants? (The nuclear plants, you just turn them on. There is no up and down.)
5. Do you see a horizon at all to use the wind to produce hydrogen and piping that to wherever the grid is? (It's a good idea, but it is not something we'll see in the next 5-10 years. About 20 years down the road. Wind would be cheapest way to generate hydrogen now, but we don't have the plant to do it.)
6. How far is too far for transmission lines from a plant? (This depends on how large the generator is going to be, how much power is in the lines, how high the voltage is, etc.)
7. Is that cost including the whole cost of siting and everything? (Yes.)
8. With the non-firm rights, what does that do to the buyer? (He doesn't care where he gets it from. This is just between the generator and the people that run the network.)
9. If the wind and coal plants are generating at the same time, would we need to have firm and non-firm rights on that line? (It may happen. The coal plant may tie up the transmission line so that the wind plant can't get on to sell power at a cheaper rate.)

10. The question about prairie chickens, nesting, reproduction, has this been discussed? (Yes. The habitat is the issue.)

11. The REPP (Renewable Energy Policy Project), I read at least 5 of the people in this are with the Renewable Energy Group, does this make an objective study? (I am familiar with the study: all the work done by this group is done by a large panel. Their aim is to bring objectivity to the group.)

12. Are there low-frequency issues? (The low-frequency problem came from the older machines whose blades were set behind the tower. Each time the blade crossed behind the tower it would make a noise. The newer machines do not have this issue.)

13. They no longer produce any frequency sound? (There is sound, but nothing significant.)

14. Speaking of global climate change, the shifts in the wind may change, are they looking at this? (I would prefer to put in more wind power systems to get away from the carbon-emitting power systems.)

15. Currently Kansas does not have state siting guidelines on wind. Do any states have it? (Minnesota has very good siting guidelines and are the best example.)

16. Do you recommend a statewide permitting system? (I don't have an answer.)

17. Regarding involvement with local community, is that to learn the community's concerns and adjust the plans or to explain to the community so they will accept it? (It is both. It has to be honest and sincere in both directions.)

18. If there is wind development, is there any place a community can go to for guidance or resources? (I don't think there is anything national. Various states or counties may have something.)

19. Why are there problems in suburban areas? (Some people don't like the look, and there are more people concentrated in those areas.)

20. In your opinion, are there places that from a natural resource standpoint should be off limits? (National Parks. Many would not want to see them changed.)

21. If we lifted property tax exemption, would that shut it down? (It doesn't have to be all or nothing.) (Yes it does, with Kansas Constitution.) (I don't agree. Can abate property taxes. It is in the statutes now to phase in abatement for power. Another thing you can consider in reducing the tax assessment for wind plant is it is different than a conventional plant. You don't pay tax on the fuel. You only pay on the capital investment. With wind, all you have is the capital investment. You could argue that only half should be taxed. This has been done.)

Additional comments (Ludwig): Another quirk is the way utilities are assessed. We are assessed by the property valuation division. These would be assessed by a state level, but as a local unit.

Additional comments (Evans): It is not just for wind. It is the risk or uncertainty of changing rules.

22. What is the cost comparison of nuclear and coal versus wind? (Les will speak on this.)

24. What counties were involved in this study? Locations of wind plants? (Lincoln, Minnesota; Culbertson, Texas; Morrow, Oregon; Umatilla, Oregon.)

25. Were the projects on the tax roles? (No)

26. Tell me more about the citizens' views on wind energy and utility responses? (Ask the customers what do they think about clean wind energy. Many say they want it. Some utilities allow customers to pay extra to tap into the wind generated energy. Nebraska recently held public meetings. Overwhelming response says, "do it.")

27. Regarding building components for wind turbines, is this being done in one of these states? (There is a blade manufacturing plant in North Dakota. There are a couple of tower manufacturers in Texas. A lot of the components, the gear boxes, and electrical switches come from the U.S. Although many of the turbines are actually Danish products, over 50% of what is in them is made here in the U.S.)

28. Wichita already builds aircrafts; they are excited about building wind turbines. I understand there has been the problem with shipping these large pieces, trucks available to carry the large turbines, etc.? (Yes, the machines do get larger and this creates problems getting under an underpass, etc. Good opportunity for jobs around these plants. The largest wind turbine manufacturer in the world is in Denmark. They have been considering building a plant in Portland, Oregon. This would have generated several thousand jobs. This was put on hold due to the uncertainty of the production tax credit. This won't happen in every state.)

**Break for 5 minutes**

**Reconvene 11:50.**

### **Markets for Wind Energy**

Co-chair introduced Les Evans, Garrad Hassan, SERCC liaison to the task force.

Evans noted that he's a worldwide wind-energy consultant. I have been into renewable energy 2 to 3 years and 25 years in the power generation area. My background is power generation: fossil, nuclear, gas, and oil. Hopefully, I can bring some information to show you the decision process utilities make and what they go through to decide what to do to generate your future needs. I will answer some specific questions about costs here in Kansas. I want to be sure we all understand the same terms. I will go over the considerations that are given during a planning process when you are deciding what type of technology you will choose. I will start on a national level and end up talking about Kansas specifically. The information I am using is

primarily from public sources, such as the Energy Information Administration, an arm of the Federal Government, charged with collecting data, and make it available for bodies like this to use.

Powerpoint presentation entitled "Markets for Wind Energy" (available as a PDF at [http://www.kansasenergy.org/sercc\\_wptf\\_meetings.htm](http://www.kansasenergy.org/sercc_wptf_meetings.htm)).

The electric industry is in transition. The old days where everything was regulated no longer exists. Generation is deregulated. Transmission is regulated. Distribution is mixed, state to state. Kansas is a regulated system. Early setbacks have kept us in the transition process.

Definition of electric power vs. energy: Power is capacity. Energy does work. When I talk about 100 MW wind farm or 500 MW coal plant, I am talking about the capability it has to generate. When I talk about energy, that is the actual kilowatt hours that are generated from the plant.

**Questions and Comments about Evans' presentation included:**

1. Could you explain kilowatt versus megawatt? (If you move the decimal point one point to the left, you would say 6 cents per kilowatt hour as opposed to 60 dollars per megawatt hour, that would be an equivalent value.)
2. What is the current market for Wind in Kansas? (Westar Energy issues an RFP for up to 200 MW of renewables as of 2/04. Empire District based out of Joplin, Missouri, has indicated they are looking for up to 500,000 MW-hours in renewable energy in the Flint Hill area. Sunflower Electric operates in the southwest corner of the state, plans to purchase 30 MW of wind. Numerous Kansas municipals have signed letters of intent for wind.)
3. The base rate is regulated by the corporation commission. Are you saying that wind generators, if they sell in Kansas, they are not subject to regulation? (If they are located in the state, they have to sign a certificate of convenience with the state as a utility.)
4. With the utilities looking to purchase renewables, is this driven by cost of electricity or is there something else? (Lot of factors Points to ponder.)
5. If a Kansas-based utility purchased wind power and then sold it on the stock market and moved across state line, how does that play with the developers and the utilities? When you set up initially with the developer and utility, you would approach the corporation commission to build this into your rate base, but it could be sold to another state at a profit to the company? (If the wind farm is owned by a third party, the utility can purchase it from various places. If they are purchasing it to utilize their own system, they will try to rate base that. At the end of the day, you can't tell one electron from another electron. As that energy is incurred in my system, I free up other resources in my system, whether it is nuclear, coal, gas or oil. If it was economically viable that I could sell profitably those others into the market, then I could offset that profit. Utilizing rate base access that goes to offset or reduce the cost to serve the customer.)

6. Why would a utility request a geographic location for power? (There is a lot of discussion over transmission and the costs. It is primarily talking about moving energy from a remote location over transmission lines to a load. If I take a generation resource and interconnect it within the system, and turn around and withdraw it to use, I don't incur transmission service charges because I am consuming it locally from right at the source. It is called network resource. The question of who pays for the transmission systems is basically the transmission system was built by the individual entities that have loads to serve. So if an additional capacity comes in suddenly and utilizes that capacity to move energy from one location and out to another and now I need additional capacity to handle that load, who pays for the upgrade?)

7. So it would be a transmission based request? (They would incur minimal amount of transmission expense. There would be minimal concern about constraints due to congestion. Why do people want wind in Flint Hills? Because there is a stout transmission system serving the load areas in the eastern part of Kansas: the main Wichita area, southeast Kansas, and the I-70 corridor. The transmission lines currently lie along I-70. These are all interconnected and run across the Flint Hills. Matching up good wind resource with good transmission, and the energy sold locally, that is where it would happen. That is the driving force behind that. Look at natural gas. We are putting all of our eggs in the natural gas barrel from the standpoint of expansion in the U.S. Where is the natural gas going to come from? How are you going to get the wind power? Coal mines are not next to the coal plants. We spend a lot of fuel moving a lot of real estate, moving it from one location to another, just to burn it up.)

8. Westar has an RFP out, Empire is requesting something? (They are looking for approximately 500,000 MWH (megawatthours) or 150 MW of wind energy out of the Flint Hills area.)

9. Wyoming recently passed authority to create the issuance of \$1 billion worth of bonds to build transmission lines. I know they have wind power there. Will they also be shipping coal? (They have a great natural resource in coal and in wind. Both are valued.)

Lee Allison: There is another resource, natural gas from coalbeds. Limitations on the pipelines makes it difficult to sell.

**Break for lunch at 12:43 p.m.**

**Resume from lunch at 1:05 p.m.**

Jerry Karr introduces Al Macfarlane, Geohydrologist at The Kansas Geological Survey.

Al Macfarlane: I am here to present an overview of the hydrology of the Flint Hills. My master's thesis was on "The Geologic Constraints on Land use in Northeastern Morris County, Kansas." I also worked on a source water assessment project, field-based project looking at delineating the recharge area of Crystal Springs, which is the source of water for the city of Florence in Marion County. There are a number of natural springs in the Flint Hills. Springs are a good indication of groundwater.

Powerpoint presentation entitled "Brief Overview of the Hydrology of the Flint Hills" (available at [http://www.kansasenergy.org/sercc\\_wptf\\_meetings.htm](http://www.kansasenergy.org/sercc_wptf_meetings.htm)).



**Questions and comments about Macfarlane's presentation included:**

1. Are there any studies on the Flint Hills itself? (None that I am aware of; however, the bedrock and limestone units are strong. Unlikely to fail.)
2. Regarding aesthetics, if they are connected by underground conduit rather than upper power lines, will this hurt it? (Actually would probably improve it, make it more permeable for groundwater to penetrate into the soil. The soils in the Flint Hills are remarkable thin and tend to be clayey. As you get down into the lower part of the soil profile, you are looking at gravel deposits and basically the rubble or remains after limestones are dissolved by rainwater.)
3. How deep are these aquifers? (Some are on the surface and others could be as much as a couple hundred feet below the surface.)
4. So this smaller system is why people tell us particular types of construction can affect their well? (No. Seasonality. You have a small volume of water that can be stored in limestone in comparison to what is in a sand and gravel aquifer. It is not a matter of shutting off recharge because someone put a posthole in; it may actually increase it. It's more a matter of the aquifer's capacity to hold water, which is very small. Water levels in wells can fluctuate seasonally over 30-40 feet because they have such a small storage capacity that any input (or lack thereof) from precipitation increases (or decreases) the levels in a short time period.)
5. Is there much of filtering with layers? Perhaps with livestock droppings. (Yes, some springs are fed by sinkholes—large openings formed as rock dissolves—so yes, there is some filtering, but don't see much contamination from animals.)
6. I was envisioning a wind complex on a ranch with cattle in the vicinity, with the connecting lines so it might not be an advantage to improve the downward movement of water. (It is probably okay because the density of droppings would be fairly low. It is over a big area and you may be increasing permeability in a local area, you take into account the square miles around it, it will probably have very limited affect.)

Jerry Karr: One factor may be that we have little concentrated feed lot activity and livestock is very seasonal.

7. Are there any state or federal restrictions concerning the water recharge areas? (No, not in regard to wind generation or wind farms. Source water assessment areas are mandated by the EPA to be delineated by cities and water supplies. But with any fallout, this is entirely at the local level. This only applies to contamination sources, not construction.)

Jerry Karr: The Gray county wind site had gone through procedures to get a permit to set up the wind farm in an area where there is a large aquifer. (It was probably signed off by state water board.)

Jerry Karr: You are probably seeing this in other counties, Wabaunsee and Riley. Thank you Al. Let's go to the leasing and land-trust assumptions. Richard Porter will give a brief overview; then we will have questions and feedback from the task force.

### **Reports on Leases and Land Trusts**

Richard Porter: Two main things I found were a checklist for guiding landowners considering a land lease and a model wind lease. Wind energy companies have a lease form, but there may need to be a draft model lease for landowners to use with their attorneys so they have some guidelines to follow.

Jerry Karr: Looking historically, the oil and gas industry went out and leased land, but the landowners did not know what was going on. The southwest coalition evolved from this. They standardized land-use leasing. This eventually evolved into a model leasing concept format used in the oil and gas industry.

Jerry Karr: Richard Porter is the point person for this topic. There are a number of lease agreements in Butler, Morris, and Riley county. Not just a Flint Hills issue.

Task force members commented on the importance that both sides be represented in any land lease agreement.

Jerry Karr introduced Joe Stout to discuss land trusts, in response to task force charge 7.

Joe Stout summarized Option A, the Grassland Reserve Program in the 2002 farm bill. This is geared to protect rangeland, grassland, pastureland, etc., while maintaining grazing operation. It offers easements, rental agreements, and a restoration project.

Task force comments and questions included:

- This would be a voluntary agreement. However, if a transmission line is proposed through this area, it supercedes the easement contract.
- The issue in establishing the easements is not to keep from being grazed, but to establish the difference in its value from doing whatever and the value of being grazed.
- Any conservation program has the right to review. If you are supposed to be doing something according to your easement contract, they should be able to review this.
- What are the qualifications, such as number of acres, that lets someone tap into easements, who is not eligible? (They pick areas in good condition, and others that are undeveloped. Minimum of 40 acres.)

Option B, the Farm and Ranchland protection program, was established to provide matching funds to state travel or local or non government organizations with existing farm and ranchland protection programs and to purchase conservation easements. It involves farmland as well as grassland. This has been widely used throughout the country. The hang up would be the entities that would be coming up with the other portion of the matching funds. 50% from government, 25% from landowner, and 25% from other entities.

Task force comments and questions included:

- Butler County was interested several years ago, due to the increase in development. I suspect housing is the driving force in Butler County.
- The big hang-up in Kansas is we have tremendous demand, but we have no funding source for this compared to other states.
- This could be one of the recommendations. In order to be successful, there may need to be some public participation. Also suggest some sort of fee permit, assessment, or franchise fee, to charge for wind developments, that could be put back into requiring easements in areas.
- In the Nature Conservancy, with the topic of land trust. This is just a small scope of their activities. They were one of the pioneers that took this on back in 1961. They have something like \$2 million acres in conservation easements.

Option C, the Kansas Land Trust, is relatively new. They were founded in 1990 as a not for profit organization to protect and preserve lands. Ecological, scenic, historic, agricultural, and recreation lands in Kansas. Primarily accepts conservation easements from willing landowners.

Option D, National Heritage area, is a place designated by U.S. Congress for natural, cultural, historic, and recreational resources combined to form a cohesive nationally distinctive landscape arising from patterns of human activity shaped by geography. It takes a partnership between the National Park Service and some local volunteer organization. This would be a long-term effort. Not viable to happen within 2005.

Jerry Karr: As Joe indicated, this requires a specific act for the area. Another project is pending in the Lawrence area. Iowa has one called "smoke stacks and silos," which has been approved. Federal and matching monies would have to come.

Task force comments and questions included:

- Would potential funding be used to purchase the easements? (It appears to be for program usage.)
- This is in the infant stage. Manhattan down to Ark City includes the Flint Hills. 1-2 year process to get funding. \$1 million per year for the area as a whole.
- Would this be something that would help us preserve something in that area? This seems more of a tourism rather than an easement concept. Not that they aren't compatible, but it was not on the viewscape when we started this process. It may need some encouragement from the Governor and might need some matching money.
- This may be incompatible in some areas. Looking at what Joe and Allan have prepared, does this look like something we could put into the report?
- I suggest we add a voluntary mediation agreements between the wind developers, communities, and landowners as a possible mechanism for the amount of acres taken out of production due to wind power, create a fund for wildlife habitat restoration, or something, to balance out the damage that may be done.
- That's the whole reason why we are here. If you take some of the native tallgrass prairie, you can't reinvent it somewhere.
- It is not necessarily true that every wind power developed, will be put in the native tallgrass prairie. There is a lot of habitat in the Flint Hills that does not qualify for this.

You can still consider that some areas in the Flint Hills are pristine sites, but never see any development.

- But this does not address the fragmentation problem.
- All of these mechanisms are playing fairly minor roles unless there is some significant source of funding identified, whether it comes from combinations of public, private, state, local, user fees, whatever, that somehow has to come with this.
- Specifically we are looking at the wind industry and preserving and protecting the tallgrass prairie. There are other development besides wind towers that potentially have impacts. Communication towers and things should be monitored as well.
- Certainly, when we put a turnpike through the center of the Flint Hills, it will change the Flint Hills. These are developments, human activities. Some are compatible, some are not. Cell towers, oil wells, sprawling suburbs, those are also eating up parts of the Flint Hills.

Jerry Karr introduced Dick Seaton, spokesperson for the Manhattan carpool riders that proposed some basic assumptions.

Dick Seaton: The four of us ride in from Manhattan, so we put together a list of our discussions to identify assumptions all people would agree on. Here's our 15 basic assumptions.

1. The capacity of the present electric transmission system in Kansas is limited.
2. The electric transmission system will be expanded in the future.
3. The federal tax credit for renewable energy will be enacted by Congress.
4. The Chase and Morris counties had no zoning.
5. There is a definite potential for development of a tourism industry in the Flint Hills,
6. The orientation of our task force should be long term (10-50 years) rather than short term (1-2 years).
7. The US energy needs will continue to grow, and wind energy will be part of that growth. There will be increasing pressure to utilize renewable energy sources.
8. The vast majority of land in Kansas was privately held. 97%?
9. Only 4% of the original Tall Grass Prairie remains and most of it is in the Flint Hills in Kansas.
10. Human activity and construction in the Flint Hills will further diminish nesting habitat of prairie grouse and other birds.
11. The Flint Hills is a multi county region and the issues respecting wind energy in the Flint Hills transcend county lines.
12. Parts of the Flint Hills are more disrupted by human activity than others.
13. Our Task Force report will inevitably make some happy and some unhappy.
14. If wind energy is developed in the Flint Hills certain landowners with turbines on their land will realize economic gain.
15. Landowners of the Flint Hills are represented on both sides of the development issue.

Dick Seaton: There are lots of basics to agree on.

Jerry Karr proposal of an additional assumption—that there will continue to be some kind of state incentives for renewable power—generated the following comments:

- If we agree on these, we will not spend a lot of time repealing, but we may want to go back and change something.
- The kinds of incentives that might allow for tax, favorable financing, have been discussed in the state.
- We ought to be thinking that is not necessarily a given. It may be happening in Europe already. It is a mature enough industry and is competitive as it is.
- We should maybe say that we expect them to continue at least on the short term.

Jerry Karr: We are just saying that there would be some kind of tax incentives continued in the state of Kansas. I don't know what they would be.

Task force discussed transmission assumptions (1 and 2). Some proposed that wording be changed to say that Kansas has limited control over that decision (or limited influence). Others suggested that task force might say that transmission, itself, is in a state of transition, and it is not clear what the outcome will be and who will have influence at the local and federal levels. This is not going to be solved in the near future. Another suggestion was an assumption stating that the task force would not consider transmission as an issue. No resolution, but moved on to discuss other assumptions.

Jerry Karr: So far, we have been focusing on the Montezuma type projects which is about 170 towers, but in Butler County there is a proposed project that involves 4. There are entrepreneurs out there trying to encourage individuals to establish their own wind facilities. In Ford County, there are some remote ranches. These smaller wind farms will probably be outside of current recommendations, do you need to have 40 in a group to be considered, or is 4 okay? What is farm exemption?

Task force responded that number of megawatts, not towers, was important factor in distinguishing small, distributed wind generation from wind farms. Tower height is also a factor.

Question raised about whether task force can assume the state of Kansas, via legislation, will not move from local county option to statewide policy?

Following task force discussion, general consensus that state probably wouldn't take control of zoning for this or any other development. Suggested that there might be some regional organization created that was selected by local level to deal with a regional problem.

Jerry Karr encouraged the task force to study this list of assumptions.

### **Mapping**

Jerry Karr introduced Ken Nelson, GIS coordinator for the Kansas Geological Survey, to talk about mapping, which is a response to charge #1, to identify and analyze relationships between areas of tallgrass prairie most appropriate for preservation and areas most appropriate for wind development. Ken has been helping us look at ways to overlay the data and hopefully we can find some kind of answer to the first charge.

Ken Nelson: We put together a subset of 30-40 layers of data for you. My goal is to show you the information and get some feed back on what other data layers and mapping we could provide to help you. We have a wind resources grid, wind potential, transmission lines, other developments like communication/cell towers and roads.

Jerry Karr: We will have to have something. We won't implement the items. We are here to put the options on the table for the Governor to accept or do something else. We are done on May 31.

**Next Steps**

Jerry Karr: Next meeting will be in 2 weeks, April 2. Probably at KTEC offices on 6<sup>th</sup> Street.

Jennifer States: The Global Wind Conference in Chicago, March 28 through April 1.

Jerry Karr: I suggest the people interested in guidelines meet to discuss siting guidelines (March 26).

Meeting adjourned at 4:24 pm on Friday, March 19, 2004. The next meeting will be April 2 at the KTEC Office Building at 6<sup>th</sup> and Van Buren, 10 am to 3:30 pm.

**Minutes submitted by:** Melany Miller, WPTF Secretary

**Minutes approved by:**